BUILDING, PERMITTING & INSPECTIONS

FAUQUIER COUNTY NEWSLETTER

DEPARTMENT OF COMMUNITY DEVELOPMENT

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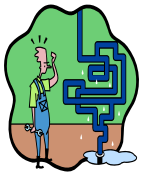
Plumbing

How are *you* testing your pipes?

When installing plumbing lines in new construction or altering existing systems, the plumbing lines are required to be tested and inspected prior to concealment. There seems to be some confusion about the requirements of the newly adopted plumbing code. There were significant changes to the method of testing of plumbing systems as well as some changes to the required testing equipment.

The International Residential Code states that drain waste and vent (DWV) systems shall be tested by filling the pipe with water to a point 10 feet above the highest fitting in the system and proven leak free for a period of 15 minutes. An air test may be performed by maintaining a gauge pressure of 5 psi or 10 inches of mercury column. This test shall hold without additional air being added for a 15 minute period. Refer to the IPC for additional prohibitions in the code requirements for commercial applications.



Water-supply systems shall be tested and proven tight under a water pressure not less than the working pressure of the system. This test shall be for a period of 15 minutes as well. For piping systems *other than plastic*, an air test may be utilized. The minimum air test shall not be less than 50 psi. Note that plastic water systems shall not have an air test but shall only be tested by water.

Gauges

The code has also made changes to the gauges allowed to be used for testing in both IRC and the IPC. Below are the requirements for these gauges.

- -Tests requiring a pressure of 10 psi or less shall utilize a testing gauge having increments of 0.10 psi or less.
- -Tests requiring a pressure of greater than 10 psi but less than or equal to 100 psi shall utilize a testing gauge having increments of 1 psi or less.
- -Tests requiring a pressure of greater than 100 psi shall utilize a testing gauge having increments of 2 psi or less.

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Are You Ready for A Dip in Your *Swimming Pool*

Spring has sprung, the flowers are blooming. The next thing to think about is jumping into your pool on that hot summer day. "No pool" well now is the time of year that many homeowners will choose to fix that problem by installing a new pool. Before you proceed there are a few things to consider.

DO I NEED A PERMIT

First you need to determine if a building permit is needed. Many homeowners believe that if you can put the pool together by yourself or blow it up that no permit is required. Spas and hot tubs are also frequently thought of as not requiring permits. The Virginia Statewide Building Code requires a permit for all swimming pools or hot tubs that have:

- Surface area that is greater than 150 square feet
- Exceeds 5,000 gallons of water
- Depth of water is greater than 24 inches

If your pool or hot tub meets any one of these requirements, a building permit is required. This includes pools that are in-ground, above ground and even pools that you blow up. Some of the pools can even be purchased at the local discount store so don't forget your permit.

WHO TO SEE ABOUT PERMITS

- You will need to talk with the Health Department about the location of your pool. A site plan depicting the location of the pool in relationship to the well, septic field and reserve field will be required. A pool may have to be moved because it has been set on the drainfield or reserve drainfield so please don't forget to find out where you may place your pool.
- You will need to talk with the Zoning Department to verify the location of the pool on your property. You will need a site plan with the exact location of

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Finishing Your Basement ?

If you are thinking about the dark space downstairs as more then storage then you need to read this article. Many home owners decide to tackle this home improvement project without realizing what is involved. Many others think that because they are doing the work themselves that no building or zoning permit is required. In many cases homeowners who have done just that find out, when they attempt to sell their home, that they now have to apply for permits for work that was done years ago. The permits that are required will mean that they have to meet all of the current codes.

PERMITS

Building permits are required when you or a contractor do just about any work to your home. There are some exceptions of course but as a general rule you probably need a permit. If you have questions about when a permit is required please give us a call and we can advise you about what is required and when. This may sound like a lot of trouble but believe me it is easier to do before you build walls and hang drywall.

If you have already done the work without the benefit of the required building permits it is not too late to make it right. We will be happy to work with you to help make your finished space a legally occupied space. Many lenders and realtors not to mention insurance companies are checking records to verify that all permits were acquired and finaled. Don't let the fear of the unknown keep you from correcting your past error. We don't really bite.

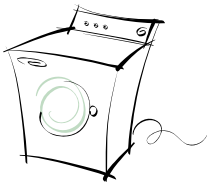
CONTRACTORS

Many homeowners will choose to tackle this job on their own and of course they are allowed to do so in the State of Virginia. They may apply for the permit in their own names. If you are planning on having a contractor perform the work for you then it will be necessary to have his licensing information in order to complete the permit application form. Please be sure to verify that the licensed contractor that you are interested in hiring is just that a licensed contractor. It is illegal to perform work as an unlicensed contractor or to contract with an unlicensed contractor. We can help you with this by looking up your contractor's licensing information. You may also look up your contractor at the State Licensing agency known as DPOR. http://www.dpor.state.va.us

BASICS

We have a basement basics building design guide here in the office. Please come by and pick one up as soon as you have the idea to finish your basement. The handout will not only help you with the plans that you will need to draw but will also help you realize what is needed for the project you are about to undertake. Many of the contractors that we work with utilize this handout with their projects. Please take advantage of our staff to answer your design questions or to visit our office and take a look at the process and the course that you will be taking. We can be a tremendous asset.

Finishing your basement is not the daunting task that some may envision. If well planned the project may be one of the most rewarding home improvements that you may ever do. It will become a part of your home and an area that enhances your family's lifestyle.



Potential Dryer Fire

When is the last time you cleaned the inside of your dryer?

Lint Build-Up is a fire hazard. Over the course of the year the average dryer sees about nine loads per week. These machines are designed to handle this type of activity and they will do it efficiently if they are properly maintained. When lint is allowed to build up, it can interfere with the performance of the appliance, but is also a significant fire hazard. Preventive maintenance is simple and effective.

Most people clean out the lint trap before drying the next load, which is a good habit to get into. The lint screen may look clean, but dryer sheets can cause a waxy build-up on the lint screen thus reducing the airflow and cause overheating. Try running water thru the screen, does the water sit on top of the mesh instead of running thru, if so, wash the screen in warm soapy water until water runs thru the screen and dry completely before replacing in the dryer, this will help with the air flow.

But more maintenance is needed to minimize the fire hazard. During the screen cleaning, some of the lint becomes air borne and settles in the surrounding area. Over time, this lint can accumulate and build up on the heating element and in other places inside the dryer, causing it to overheat and possibly catch fire. Vacuum lint from the dryer heater box.

Your dryer vent can also fill up with lint, can overheat, and become a fire hazard. When your dryer is in use, check outside to see if the dryer exhaust lap is open, and clean.

Have the interior of the dryer, lint screen and exhaust duct cleaned by a qualified service technician every 18 months, also check with your manufacturer instructions for their recommendations.

You also need to check how close is your dryer to the wall? Putting a dryer directly against a wall can crush the venting material and reduce airflow.

Preventive maintenance for a Safer and more efficient dryer:

- Clean the lint trap after each load
- Vacuum the area around the appliance weekly
- Inspect and clean the vent tube monthly and replace as necessary
- Keep the area around the dryer clean of combustible items
- Inspect the gas line for possible leaks, corrosion or 'kinks' in the line
- Inspect the electrical supply cord for fraying, exposed wires or cracking.
- Check the door seal if it is loose and replace if necessary

Small weekly and monthly chores may save your home.

'It's not if you have a dryer fire, but when!'

Smoke Detectors for Older Adults

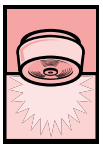
Optimizing the Smoke Alarm Signal

The use of smoke alarm and signaling systems is associated with a reduction in fire fatalities in the general population. However, recent studies suggest that older adults may not fully benefit from conventional smoke alarm systems, particularly during sleeping hours because of the prevalence of high frequency hearing loss.

In 2005, the Fire Protection Research Foundation received a Department of Homeland Security Fire Prevention and Safety grant to assess and optimize the performance requirements for alarm and aging population.

The major portion of the Foundation's study was a series of sleep studies, carried out at the Victoria University of Technology in Australia, which provided insights into the human behavior aspects of waking older adults exposed to varying types of signals and varying sound levels.

Forty-two older adults, ranging in age from 65-85 years, participated in the study. Four signals were examined:



- 3000 Hz high-frequency T-3 alarm signal (typical of that used in the U.S. smoke alarms)
- 500 Hz low-frequency T-3 alarm signal
- 500-2500 Hz *mixed frequency* T-3 alarm signal &
- a male voice (200-2500) alarm signal.

The results showed that the *mixed frequency* T-3 alarm signal provided the *greatest waking effectiveness* of the signals evaluated, including the high frequency T-3, typical of most current alarms. In fact, the high-frequency T-3 performed the most poorly of the alternative signals tested. There was a substantial difference in the median auditory arousal thresholds (20 dBA) between the high-frequency T-3 alarm signal and the mixed frequency T-3. The results also indicate that a male voice alarm is not suitable for older adults.

In summary, the sleep study concluded that the high frequency alarm signal that is typically used in current smoke alarms should be replaced by an alternative signal that offers significantly better waking effectiveness across the general population, once the nature of the best signal has been determined. Further sleep research is underway at Victoria University of Technology to address the issue. In the interim, the study recommends that the use of interconnected smoke alarm in bedrooms be encouraged to provide the maximum potential benefit of current and future alarms. Proper use and maintenance of smoke alarms is also critical to realizing the benefits of smoke alarms.

Two reports have been published from this project - one is a summary report, which describes the risk and technology assessments of the project and one reports on the sleep studies themselves. They are available at www.nfpa.org/foundation.

The Foundation is currently in receipt of a second Fire Prevention and Safety grant which will explore the broader issue of notification effectiveness for various high-risk groups in the general population.

NFPA Journal - Kathleen H. Almand ,P.E. FSFPE

From The Hot Seat

David J. Cooper - Building Official

Welcome to our second edition of our quarterly newsletter. I hope that you found the 1st edition to be enlightening and that this edition will be just as informative. We have put articles into the newsletter on a number of different topics that we thought would help contractors and homeowners find their way in this maze of construction policy.

In an effort to better inform the public about policy and code requirements we had our first seminar. The presentation was about the required information that is needed to get plans for building projects approved with the first submittal. I was pleased to see that 12 contractors were interested in the program but only had 6 actual attendees. We plan on having a seminar every 45 days or so and I hope to see more of you at those events.

Upcoming topics to our seminars will include, “new third party inspection policy”, “when is a building permit required” and “what are the minimum inspections”. If there are any topics that you feel would make a good seminar please let us know and we will see what kind of interest is generated. We want to educate the public about what interests you. We need your feedback. We will leave a form up front at the counter where you may write down your suggestions as well as comment on proposed presentations.

Another of our new projects has been to attempt to facilitate the issuance of trade permits for small projects on the same day. When you bring in your permit application for service upgrades and similar projects we will try to have someone review what you are doing and try to get the permit signed and issued on the spot. Not all projects will be able to be processed in this manner but those that can, will be. This seems to be working well and we hope that this has been a help to all that have been able to take advantage of this new program.

Along the same lines we are having our plan reviewers take a quick look at plans that are being submitted for review. When we are able to verify the basic requirements needed on plans, to even attempt a plan review, we can avoid the submittal of inferior plans. When inferior plans are submitted they sit in line for plan review only to find that when they come due for review that plan review is impossible to perform because of the lack of information. This type of delay is frustrating at best. It has been our hope that this program has limited this type of occurrence.

We hope that you have found this program as well as the other programs that we have started to be helpful and we are always interested in your impressions as well as ideas.

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Hang'em High

During inspections our inspectors have noticed that the supports for the water and waste lines are not always installed properly. The materials used for hangers, anchors and strapping should be an approved material and of sufficient strength to maintain the weight of the pipe and its contents. It is also important that these supports are of the correct material so they will not promote galvanic action. Dissimilar metals are the primary cause of this reaction. Supports are required to maintain proper alignment and prevent sagging, but also allow for movement associated with expansion and contraction of the pipes. The spacing of the supports will depend on the type of piping used. Remember that the support starts immediately after the change of direction. These supports need to be addressed both vertically and horizontally. Check the tables in the IRC and IPC to verify the distances between the supports.

Are You Protected

Now that your pipes are installed and tested, you need to protect them against physical damage. This also needs to be completed before you call for your inspection. In concealed areas where pipes run through holes or notches in studs, joists, rafters and are less than 1.5 inches from the nearest edge, the pipe shall be protected by shield plates. These protective shield plates shall be a minimum of 0.062 inch-thick steel and shall cover the area of the pipe where the member is notched or bored. Where they penetrate the sole or top plate they shall extend a minimum of 2 inches above the sole plates and below the top plate.

May 2007 - National Safety Month

The key element to electrical safety is *awareness*. Help kick off National Safety Month by educating your family to the importance of respecting electricity and by properly using electrical products in your home, school and work place. Everyone from the oldest to the youngest needs to think safety. Start today on making a safer environment for everyone.

Check light bulb wattages
Do not let appliance cords hang over counters and sinks
Test GCFI receptacles in the kitchen-basement-bathrooms
Do not overload outlets or extension cords
Never place ladders near electrical power lines
Don't leave unused extension cords plugged in
Test Your Smoke Detectors every Month
Replace all cords that show wear and nicks
Remove wires from under the rugs
Maintain access to panel boards
Label all breakers in the panel

THINK
SAFETY

Check these web-sites for further information on how to protect your family

www.esfi.org
www.iaei.org
www.electrical-safety.org

'Pools' - Continued from page 1

the pool on the lot and the distances from your property line.

- Finally you need to apply for the building permit to install your swimming pool. We will need copies of the approvals of the Health Department and the Zoning Department before we can process your application. If you are seriously considering a pool please stop by the office and get one of our handy pool handouts that will clarify the plan submittal requirements as well as the Code requirements for the installation.

SAFETY

Statistics have shown that drowning occurs most frequently when family members or friends are nearby in the home. Drowning can be a very quiet and devastating event. The first place to check if someone is missing is the pool because 'Every second counts'. A person could drown in the time it takes for you go to answer the phone. Just because someone knows how to swim does not mean they will not drown.

Pool safety issues are paramount if you are going to have a wonderful summer with your pool. These are a few things that we think are important to consider.

- Who is responsible for watching everyone?
- Consider who is going to be the 'life guard'.
- Have a good plan of action in case of an accident.

CONTACT NUMBERS

Building Inspections or …….…. 540-347-8646
Fax ……..... 540-347-2043
Zoning Department ……..... 540-347-8789
Soil Scientist ……..…. 540-341-3374
Fire Marshal ……..…. 540-347-6995
Highway Department ……..…540-347-6441
Health Department ……..……540-347-6363
Dig Smart ……..…1-888-258-0808
Miss Utility ……...……...1-800-552-7001

Permitting & Inspection questions e-mail:
Jennifer.Sexton@fauquiercounty.gov

REFERENCES TO OTHER SITES:

www.fauquiercounty.gov
www.vbcoa.org
www.dhcd.virginia.gov
www.iccsafe.org
www.energycodes.gov/recheck
www.vpmia.org
www.osha.org

Office Hours 8:00 – 4:30 Monday-Friday